

CeREs: A Compact Radiation Belt Explorer

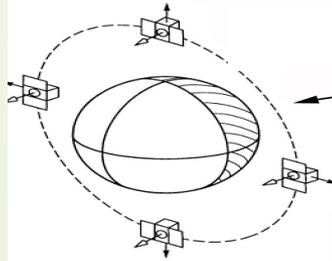
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First fully NASA funded CubeSat

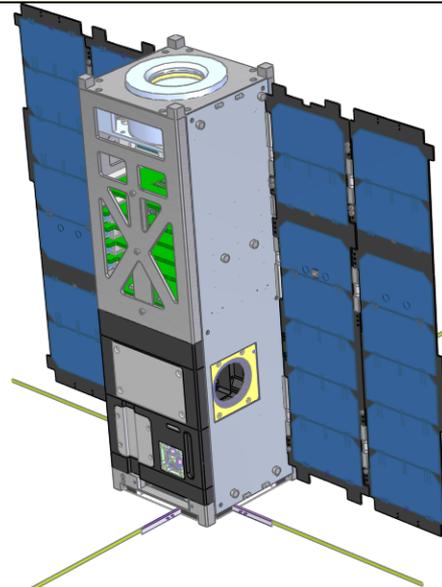
Novel innovative sensor MERiT:
Miniaturized Electron Proton Telescope

Synergistic science with Van Allen Probes

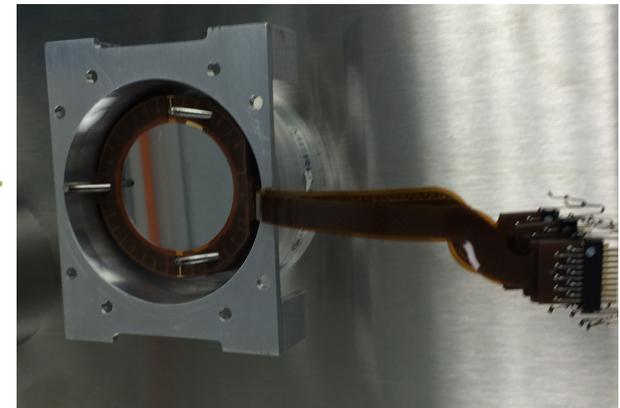


Primary Science Goal: How are electrons energized and how are they lost from the Earth's radiation belts ?

Secondary Science: How are solar flare electrons energized ?



- 3U CubeSat with deployable solar panels
- MERiT sensor at the top



MERiT sensor detector assembly at Energetic Particle Laboratory 672

- Three year mission with one year science
- MERiT Leveraged from IRAD
- SECP and GSFC engineering support

- Expected delivery of CubeSat May-2015
- Ph.D. graduate student with PI
- CoI institution: SWRI